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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/757,858 | 01/15/2004 | Richard O. Glasson | CPI 13 | 4614 |
| 26345 | 7590 | 08/05/2005 | EXAMINER | |
| GIBBONS, DEL DEO, DOLAN, GRIFFINGER & VECCHIONE 1 RIVERFRONT PLAZA NEWARK, NJ 07102-5497 | | | LAZO, THOMAS E | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3745 | |

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-----------------------------------|-------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/757,858 | GLASSON, RICHARD O. | |
| | Examiner Thomas E. Lazo | Art Unit 3745 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-11,14,15,17,20-25 and 29-38 is/are rejected.
- 7) Claim(s) 12,13,16,18,19 and 26-28 is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

| | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/24/04 5/19/05</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 11 is objected to because of the following informalities:

Claim 11 should be canceled since it is a duplicate of claim 10. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11, 14, 15, 17, 20-25, 29, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Glasson (6,234,061). Glasson discloses a position sensor with a frame, a spool rotatably mounted to the frame, a feed point opening in the frame located in close proximity to the spool a cable passing through the feed point and windable about the spool and having a distal end adapted to be affixed to an object to be sensed, wherein the spool rotates as the cable winds and unwinds in relation to movement of the object, the spool is operable to travel along a substantially linear path in response to the rotational movement of the spool, a sensing means is adapted to sense the position of the spool along its substantially linear path, the sensing means includes a Hall-effect transducer operably disposed to a target magnet movable in cooperation with the movement of the spool, the Hall-effect transducer is mounted to the exterior of said

frame, the spool travels along a linear path parallel to the rotational axis of the spool, the spool has a threaded engagement with the frame to cause the linear travel of the spool as the spool rotates, the spool has a threaded extension that is threadedly engaged with a threaded opening in the frame, the frame has a bushing having threads formed therein and the threaded extension has mating threads, the pitch of the threaded engagement causes the spool to travel a distance along its linear path about the width of the cable for each 360 degrees of rotation of the spool, the sensor includes a backlash mechanism to prevent backlash within the threaded engagement between the threaded extension and the frame, the backlash mechanism includes a spring adapted to create a constant bias on the threaded extension to force the threaded extension against the threaded opening in the frame to prevent backlash therebetween, a recoil spring biases the rotational movement of the spool to cause the cable to wind up on the spool, the recoil spring has one end affixed to the rotatable spool and another end is fixed with respect to the frame, the inner end of the spiral spring is affixed to a hub that is rotatably fixed with respect to the frame but is movable linearly along with the linear travel of the spool.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glasson, as applied to claims 1 and 29 above. Glasson discloses all of the claimed subject matter except for variations of modifying the sensing means that are common in the position sensing industry.

Official notice is taken that the specifics of claims 31-38 are well-known elements of position sensors. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the position sensor of Glasson to include the specifics of claims 31-38 as a matter of engineering expedience.

Allowable Subject Matter

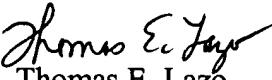
Claims 12, 13, 16, 18, 19, and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to status of this application or proceeding should be directed to the Patent Application Information Retrieval (PAIR) system. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.



Thomas E. Lazo
Primary Examiner
Art Unit 3745

TEL
August 3, 2005